



The Relevance of Basel III in Ensuring Prudent Risk Management in Banking

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ABSTRACT

This paper discusses the necessity and effectiveness of Basel III in ensuring prudent risk management in the banking system across the world. The aftermath of the 2007/2008 global financial crises provoked the introduction of Basel III in 2009. It was published to improve upon Basel II which proved to have serious weaknesses exposed by the financial crises; and more importantly to avoid a reoccurrence. A careful analysis of the 2009 Accord shows that minimum capital requirements, risk management practices and disclosures to the public are reflective of risks inherent in banks' portfolios. Thus, it provides more controls than those stated in previous Accords, thereby promoting a more resilient banking sector and, to a greater extent, ensuring its stability and soundness: a case for its necessity. However, effective and timely implementation of the requirements in the Accord are largely dependent on the policy space of member countries. In addition to the need for upgrading supervisory capacity, some policy guidelines for the Basel III framework needed to also ensure a successful implementation are still a work-in-progress, suggesting that, Basel III is not sufficient in guaranteeing prudent risk management in totality in the global banking industry. It is however, significant to emphasize that Basel III is a means to an end and not an end in itself. Again, prudent risk management in banking is a process and not an event. In addition to the constant training of key stakeholders, periodic review of the implementation of the Accord to improve its requirement is very significant in ensuring prudent risk management in the international banking system.

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1. Introduction

Risk management constitutes one of key concerns of all banking institutions. Risks are very central to the operations of every bank as they are the main reasons for earning returns on investments and variation in returns. The higher the risk, the higher the return on investment, all things being equal. Due to the critical nature of risks and the devastating effects they are likely to pose to the survival of every bank, it is very crucial for banks to acquire the needed capacity to develop and implement effective risk management policies and procedures. This is to enable the banks identify and measure all potential risks associated with their peculiar operations and consequently put in place the appropriate mitigating measures to avoid making huge losses. In addition, risk management policies should also be periodically reviewed and amended to reflect changing conditions. The impact of the fall of international-oriented banks could have serious consequences on the global banking system as occurred in 2007/2008, thus leaving the risk management in the hands of banks themselves could be suicidal. It is in this framework that the Base Committee of Banking Supervision periodically issues standards to address risks inherent in the operations of banks which operate internationally. In 2009, the Committee introduced Basel III to improve the requirements under Basel II to further strengthen the soundness and stability of the banking system worldwide and ensure that banks are better positioned to deal with financial stress. (Annenberg, Horn, & Hawken, 2010; Basel Committee on Banking Supervision, 2009). The Basel III was necessitated as a result of weaknesses exposed by the global financial meltdown.

This paper provides the overview of Basel I, II and III, show the key differences between them and examine the effectiveness of Basel III in bringing prudent risk management in banking. The papers also looks at the status of Basel III implementation as at September 2015.

2. Background to the Promulgation of Basel III

The Basel Committee for Banking Supervision was established in 1974 with mandate “to strengthen the regulation, supervision and practices of banks worldwide with the purpose of enhancing financial stability” (Bank for International Settlements, 2015, para. 1). Its establishment was in responses to financial debacle that resulted in completion of a currency exchange transaction between certain banks in Germany and United States of America due to time and regulatory differences. The Committee’s establishment was hailed by many due to the positive impacts that it was expected to have on banking system in general in terms of

standardization of banking norms, improvement in banking supervision and introduction of collective approach to tackling issues that affect the banking system.

As part of its mandate, the Basel Committee on Banking Supervision has since 1988 published what are referred to as the Basel Accords. The Basel Accords refer to set of international rules which provide recommendations on banking regulations with regards to certain aspect of banking risks relating to capital, market and operations. One of the key roles of the Basel Accord is to ensure standardization of banking practice across all nations.

Basel I which is the first accord, was published in 1988 and focused on capital adequacy and minimum capital that banks are required to hold. Under this Accord, assets of financial institutions were classified into five categories according to credit risk as follow:

- i. 0% - cash, central bank and government debt and any OECD government debt
- ii. 0%, 10%, 20% or 50% - public sector debt
- iii. 20% - development bank debt, OECD bank debt, OECD securities firm debt, non-OECD bank debt (under one year maturity) and non-OECD public sector debt, cash in collection
- iv. 50% - residential mortgages; and
- v. 100% - private sector debt, non-OECD bank debt (maturity over a year), real estate, plant and equipment, capital instruments issued at other banks.

Basel I required banks that operated internationally to hold capital not less than 8% of their risk-weighted assets with the aim of mitigating credit risk – a minimum of 4% in Tier I Capital (Equity Capital + retained earnings) and more than 8% in Tier I and Tier II Capital. Thus, a bank that has risk-weighted assets of \$200 million, is required to maintain capital of at least \$16 million.

According to Chumo (2011), the introduction of Basel I brought immediate improvement in the capital ratio of undercapitalized banks and increase the ratio to Risk Weighted Assets (RWA) for G-10 Banks from 9.3% in 1988 to 11.2% in 1996. In addition to this, the Accord provided a platform for standardization of capital requirements across the world and provided

some level of mitigating measure for one of the key risk facing international banks, Credit Risk. Credit risk is the risk of that a borrower may fail to honor its debt obligations when they fall due. Not only that, Basel I contributed to global awareness of the importance of holding capital in anticipation of possible financial distress, the realization that international banks do not operate in isolation and the need for collective efforts towards achieving soundness and stability in the banking system.

Despite the above positives, Basel I was bedeviled with certain problems. For instance, the scope of 1988 Accord Capital Requirement was limited to credit risk. This Accord failed to take into consideration other key risks that have the potential to derail the banking system. These key risks include market risk, liquidity and operational risk. Again, the Basel Committee on Banking Supervision expected national authorities, such as regulators, to ensure that banks within their jurisdiction comply with the Basel I capital requirements. The inability of these national authorities to accurately verify the calculation of risk-weighted assets could result in understatement of the capital adequacy ratio and consequently, the minimum capital banks were supposed to hold. According to Perez (2014), the failure of Basel I to consider the degree of riskiness of counterparty within an asset category was one of its setbacks. The assertion by Perez (2014) is valid because this had the tendency of undermining the accuracy of appropriate minimum capital that a bank with riskier counterparty should hold, misleading of national authorities or supervisors and investors, and reducing the capacity of such banks to survive during crisis.

The above setbacks associated with Basel I necessitated certain amendment in 1996 to incorporate market risk. However, the amendment was not sufficient as a host of problems were left unresolved. It was therefore anticipated that in order to further strengthen the stability of the international banking system, it was necessary to take a holistic view of risk management practices for banks that operate internationally. It was on this basis that the Basel Committee on Banking Supervision came about with the Basel II. Basel II was based on three pillars namely Minimum Capital Requirement, Supervisory Review and Market Discipline. (Basel Committee on Banking Supervision, 2006). The second Basel Accord was to be fully implemented by the fourth quarter 2015 with “Go Live” Implementation scheduled for first quarter 2016.

Even though Basel II was a result of the revision of Basel I, the requirements of the latter was not fully discarded. The provisions of Basel I relating to international banks holding capital equivalent to 8% of risk-weighted assets, the methods of estimating of market risk - Standard Approach and Internal Model Approach, and definition of eligible risk remained unchanged. The main differences between Basel I and Basel II are that the latter:

- i. Prescribed three methods of calculating credit risk made up of Standard Approach, Foundation Internal Ratings-Based Approach and Advanced Internal Ratings-Based Approach;
- ii. Introduced a capital requirement for operational risk exposures and prescribe three approaches for calculating such capital requirement – Basic Indicator Approach, Standardized Approaches and Advanced Measurement Approach;
- iii. Required financial institutions to assess their overall risk profile and calculate the capital to be held against this additional risk;
- iv. Provided supervisors the authority to evaluate each bank's overall risk profile and proceed further to prescribe a higher capital ratio where necessary;
- v. Required banks to disclose information relating to the estimation of their capital positions and risk management processes.

There is no doubt Basel II was an improvement on Basel I due to certain advantages it provided. Firstly, the risk-insensitivity problem regarding counterparty / default risk associated with Basel I was to a large extent solved under Basel II as the risk – weights used in calculation of capital requirement for credit risk was based on credit-rating undertaken by internationally recognized rating agencies such as Standard and Poor's under the Standard Approach. Secondly, Basel II provided a variety of standardized approaches to calculation of capital requirement and autonomy to banks to choose the appropriate approach based their peculiar circumstances. Thirdly, while providing this autonomy to banks in the calculation of their capital requirement, the Second Accord provided some checks on banks by mandating supervisors or regulators to ensure that risk management processes of banks are of international standard. Lastly, the introduction of operational risk in measurement of minimum capital requirement had the potential of enhancing the ability of banks in dealing with stressful

situations. Pillar 3 of Basel II also introduced public disclosures of vital information that had the potential to influence the investment decisions. The public had the opportunity to access the information relating to calculation of capital requirement and risk management practices and reward banks where necessary through investments.

However, the Basel II was not without flaws. According to Chumo (2011), Basel II has contributed to the effective management of risk and capital requirement but not without deficiencies. Datey and Tiwari (2014) contend that Basel II accounted for the change in behavior of banks and contained gaps that served as fertile grounds for banks to exploit. In fact, the global financial crisis between 2007/2008 has been mainly blamed on the gaps in Basel II. (Moosa, 2010; Basel Committee on Banking Supervision, 2009). The main issues attributed to Basel II in relation to the financial crisis were as follow:

- i. The average level of capital requirement under Basel II was inadequate resulting in the collapse of many banks;
- ii. Basel II's interaction with fair-value accounting caused remarkable losses in the portfolios of intermediaries;
- iii. The delegation of assessment of credit risk to non-banking institutions, such as rating agencies under Basel II framework was subject to possible conflicts of interest;
- iv. The key assumption that bank's internal models for measuring risk exposures are superior than any other was said to have been proven wrong;
- v. Basel II provided incentives to intermediaries to deconsolidate from their balance sheets some very risky exposures.

However, there are others who hold a contrary view on the fact that Basel II was a major cause of the global financial crisis. According to Kolb (2010) it may be true that Basel II might have contributed to the global financial crisis but as to whether it was the main cause is yet to be proved convincingly. There is no doubt that there were some gaps in Basel II. For instance, there were some key risks that should have been catered for under the Basel II but were neglected until the financial market was heavily hit in 2007/2008. International banking activities such as trading, securitization and derivatives were in the existence before the Basel II was published. As to why we failed to identity these risks inherent in these banking activities,

its negative on the banking system and to make adequate provisions for them is mind boggling. The dependent on the financial institutions themselves and their national supervisors to determine other risks whose estimation methods were not covered under Basel II was a recipe for disaster. Besides, the introduction of credit-rating to the categorization of assets was positive as it helped address the issue of risk-sensitivity. However, loan portfolios of international banks may not include loans to credit-rated companies. How assets relating to unrated counterparties were to be categorized were not clearly specified under Basel II. Furthermore, the Basel Committee depended heavily on national supervisors in ensuring compliance under Basel II just like Basel I. This could create a lot of problem if the national supervisors were not adequately resourced in term of funds and human resources. Decisions made by such national supervisors could be inimical to the banking system.

But, it is significant to realize that the Basel Committee on Banking Supervision in bringing out these Accords depends on ethical behavior of banks' officials, auditors and public scrutiny. One of main cause of the global financial crisis in 2007/2008 was the over-dependence on subprime mortgage market and the securitization of mortgage portfolios. For example, executives of financial conglomerates such as Lehman Brothers, whose collapse contributed heavily to the global financial meltdown, failed in their duty of ensuring ethical behavior especially regarding the timing of their Repos 105 transactions, the retreatment of Repos transaction, and misreporting the treatment of repos transactions. Again, what about Ernst and Young, Lehman Brothers' auditors who could have been more vigilant in auditing the consolidated and separate financial positions of Lehman Brothers and its subsidiaries and questioned the timing and misreporting of the treatment of repurchase agreement. Not only that, some national regulators or supervisors also failed in their duty to ensure that all the books of banks under their jurisdiction were properly audited. The highly unrealistic assumptions by some financial institutions and regulators that the housing prices would continue to increase into the foreseeable future was more dangerous to the financial system than the gaps in Basel II. Furthermore, the dependent on non-bank financial institution such as rating agencies like Standard & Poor's (S&P) argument may be flawed because these are organizations who have been involved in rating of numerous financial institutions for years and therefore had acquired adequate knowledge of the operations of the international banking system.

3. Basel 2.5 and III

3.1 Objectives and Requirements.

Basel III was published in January 2009 in response to the weaknesses exposed in Basel II in the wake of the global financial crisis in 2007/2008. This Accord was endorsed by The Group of Twenty, also referred to as G20 made up of Argentina, Australia, Brazil, Canada, China, European Union, France, Germany, India, Indonesia, Italy, Japan, Mexico, Russia, Saudi Arabia, South Africa, South Korea, Turkey, United Kingdom and United States. Prior to the publication of Basel III, the Basel Committee on Banking Supervision had introduced what it is referred to as Basel 2.5. Basel 2.5 was essentially a revision of the Basel II requirements and it was meant to address market risks that banks took on their trading books.

According to Bank for International Settlements (2009), there are two main objectives of Basel III as follows:

- To strengthen global capital and liquidity regulations with the goal of promoting more resilient banking sector; and
- To improve the banking sector's ability to absorb shocks arising from financial and economic stress, which, in turn, would reduce the risk of a spillover from the financial sector to the real economy.

The Committee intends to achieve the above objectives through capital and liquidity reforms as well as focus on systematic risk related issues. The highlights of Basel III requirement are:

- Increase in common equity requirement from 2% to 4.5%;
- Increase in Tier I Capital from 4% to 6%;
- Elimination of Tier 3 Capital formerly used in market risk;
- Introduction of Capital Conservation Buffer of 2.5% of Common Equity Tier ;
- Introduction of Counter Cycle Buffer of between 0% to 2.5% of Risk Weighted Assets;

- Introduction of Leverage Ratio with Tier I capital to be at a minimum of 3% of the Total Assets even where there is no risk weighting. The Leverage Ratio requirement will be by 2017;
- Introduction of Liquidity Coverage Ratio (LCR) to ensure that banks hold adequate levels of unencumbered and high quality assets that can be converted into cash to meet their liquidity needs for a 30-day time frame under acute liquidity stress. The minimum LCR requirement will be to reach 100% on January 1, 2019
- Introduction of Net Funding Stability Ratio of not less than 100%.
- Enhancement of risk management practices, supervision and market discipline

The key differences between Basel II and Basel III therefore relates to quality and quantity of capital requirements, counter cyclical measures, trading book capital and stressed VaR measure for trading banks. The requirement of international banks holding capital equivalent to 8% of risk-weighted assets under Basel I and II remained the same under Basel III.

3.2 The Relevance of Basel III in ensuring prudent risk management in banking

The necessity of the Basel III in enhancing soundness and stability in the banking sector cannot be over-emphasized. Nout Wellink, Chairman of the Basel Committee on Banking Supervision has indicated that the proposed amendments reflected under Basel III would ensure that certain risks relating to trading activities, securitizations and exposure to off-balance sheet vehicles are better reflected in minimum capital requirements, risk management practices and disclosures to the public (Bank for International Settlement, 2010).

Basel III has no doubt, been a great improvement on the previous Accord and its relevance in ensuring prudent risk management cannot be underestimated. The increase in common equity requirement to 4.5% and Tier 1 Capital (going concern) to 6% will further boost the banks' resilience to stress. The introduction of Capital Conservation and Counter Cyclical buffers of 2.5% of Common Equity Tier 1 and between 0 to 2.5% of Risk Weighted Assets respectively could go a long way to cover excessive risk taking such as sub-prime lending, securitization and other off-balance sheet items. Besides, the inclusion of trading and off-balance sheet transactions and attachment of more weight to securitization and derivatives have the potential to check excessive risk taking and provide better buffer for banks. In addition to these, risk management practices would also be improved through the calculation of Credit Valuation

Adjustment Capital Charge to cover mark-to-market losses on counterparty risk to Over-the-Counter Derivatives and stress testing. One of the major feature associated with the global financial crises was huge debt associated with top banks in the United States such as Lehman Brothers Bear Stearns, Morgan Stanley and Merrill Lynch. In responding to this, Basel Committee on Banking Supervision introduced Leverage Ratio of not less than 3% to avoid excessive borrowings by international banks. The introduction of Liquidity Coverage Ratio under Basel III is a plus and clearly shows how concern the Basel Committee on Banking Supervision is with regards to liquidity risk. The Net Stable Funding Ratio which was initially proposed in 2010 was re-proposed in January 2014. The Committee issued its final Net Funding Ratio in October 2014. The Liquidity Coverage Ratio and Net Stable Funding Ratio would enable that Banks would to meets their obligations when they fall due and to avoid mismatch between assets and liability. Disclosure requirement under Basel II are also enhanced under Basel III. New disclosure requirements such as full reconciliation of all regulatory capital items to the balance sheet, separate disclosure of all regulatory amendments, description of key characteristic of capital instruments, disclosure of all limits of capital and minima, disclosure of Tier 1 Capital and other capital ratios would boost public access to company information and aid in investor decision makings. Last but not least, the more stringent risk management practices and public disclosure are likely to improve investor confidence and protection.

In spite of the improvements detected under Basel III, some writers hold the view that though it is necessary to improve the soundness and stability of banking system, the Accord is not sufficient in ensuring total prudent risk management. According to Laurens (2012), the dependence on national supervisors and authorities to implement the Basel III as pertained during the Basel II is likely to slow down the implementation process and meeting of timeline as evidenced in Basel II. Lauren (2012) assertion was based on the premise that one needs to take into consideration varied national policies, cultures, regulatory framework and so on. Even though, this may be true, it is important to accommodate these diverse factors to make the Accord easily adaptable to prevailing conditions within the host nation. Where the Basel Committee on Banking Supervision deems it fit to revise the implementation timetable it can do so within a reasonable period. The Committee has already extended the completion period twice - from 2015 to March 31, 2018 and further extended to March 31, 2019 (Bank for International Resettlements, n.d.). Byres (2012) also believes that Basel III is not sufficient because the full set of policy reforms needed to address a future occurrence of financial crisis has not been completed. Byres (2012) indicates the need for robust implementation by putting

in place compelling measures to ensure that the requirements within the Basel III are fully implemented by national authorities and within time limits, and upgrade supervisory capacity is very critical.

Undoubtedly, Basel III like any regulatory or supervisory framework could have not been without limitations since predictions of future conditions cannot always be accurate. In fact, the proponents of this Accord would recognize that Basel III is a means of enhancing prudent risk management and not an end in itself. Besides, prudent risk management is a process and not an event. Thus there is the need to periodically review the existing framework and to improve on them based on prevailing conditions. Whether Basel III would lead to prudent risk management in banking depends on certain factors and a continuous assessment of it. Like the Basel II, national regulators or supervisors are being depended on to ensure compliance by banks under their jurisdiction. How well Basel III enhances prudent risk management in the banking system would depend on:

1. How equipped these national supervisors are in terms of understanding the rudiments of the Accord itself and how they are applied,
2. Adequate logistics and human resource with requisite experiences and qualifications amongst others.
3. Regular training of these supervisors by Basel Committee on Banking Supervision is therefore very significant.

In addition, the role of auditors in successful implementation of Basel III is critical. The role of auditors have not been clearly stated under Basel III. Incorporation of the role of auditors through training and collaboration will go a long way to enhance compliance of Basel III's requirements. Furthermore, the Basel Committee would still rely on the banks to calculate various capital and capital buffer requirements. In the past, unethical behavior on the part of some banks' officials brought doomed to the whole financial system. However, there are not clear sanctions under Basel III like the previous ones to deter such behaviors. Inclusion of stringent sanctions in future framework are therefore recommended if the Accords would enhance prudent risk management in the banking system.

3.3 Implementation of Basel II, 2.5 and III

According Basel Committee on Banking Supervision, Member jurisdictions have been reporting their implementation of Basel III standards since 2011. In its fourth report to update G20 Leaders on the implementation of the Basel III norms in August 2013, the Basel Committee on Banking Supervision presented a generally remarkable picture. The Committee indicated that 24 of 27 its member jurisdictions have fully implemented Basel II. The United States, Russia and Argentina which have not fully implemented Basel II had commenced the process to complete it. (Basel Committee on Banking Supervision, 2013). Clearly, with about 90% of member countries having fully completed the requirement of Basel II as at August 2013 was a commendable achievement looking at the completion period of fourth quarter 2015. It showed a great deal of commitment on the parts of member jurisdictions. Probably, the inability of United States to have completed is partly due to the complexity of the Country's banking system and the promulgation of the needed regulations to accommodate the requirements of Basel III.

With regards to implementation of Basel 2.5, Basel Committee on Banking Supervision reported that 22 out of the 27 of member jurisdiction had fully implemented it as per the August 2013 Monitoring Report submitted to the G20. Of the remaining five who were yet to fully implement Basel 2.5, United States was said to have issued the remaining parts of the requirements that would be implemented in 2014 whilst Argentina, Indonesia, Mexico and Russia had either partly implemented Basel 2.5 or had taken steps to do so. (Basel Committee on Banking Supervision, 2013).

With reference to Basel III, the Basel Committee on Banking Supervision reported that 25 out of its 27 jurisdictions as at per the August 2013 Monitoring Report to the G20, had issued the final set of Basel III based capital requirements. The Committee was confident that international banks are on track to meeting the full set of fully phased-in minimum capital requirement under Basel III by the 2019 deadline. The Committee's confident was partly based on the fact that the average Common Equity Tier I (CET1) capital ratio of large international banks had increased from 8.5% to 9% and the aggregate capital shortfall of those banks whose capital ratios were below the fully phased-in 2019 CET1, continued to assume a falling trajectory. One key concern raised by the Committee at the time was the material variations in

the calculation of risk-weighted assets across the banks and indicated a possible reforms to improve uniformity. (Basel Committee on Banking Supervision, 2013).

A similar report issued by the Basel Committee on Banking Committee to G20 in November 2015 also gives an optimistic outlook to the implementation of Basel III. The Committee's report states that the implementation of capital and liquidity requirements under Basel was generally on course with all Committee members having completed Basel risk-based capital standards by the end of 2013 (Basel Committee on banking Supervision, 2015). This was an improvement of the milestone chalked as at August 2013 and how countries such as United States and Russia which had not fully implemented the risk-based capital standards at the time had fast tracked their efforts in achieving the requirements within about four months to the end of 2013. In addition, the Committee reports that with exception of two members, all its members had published final regulations to implement the Liquidity Coverage Ratio requirements as at September 2015. (Basel Committee on banking Supervision, 2015). In addition to this feat, members continue to put in place measures to adopt the leverage ratio, the systematically important bank (SIB) frameworks and the Net Stable Funding Ratio (NSFR) under Basel III. The Committee reports that as of September 2015, 23 members representing approximately 85% its total number of members, 25 members representing 93% of its total number of members and 4 members representing 15% of its total number of members had issued final or draft regulations for LCR, the systematically important bank (SIB) frameworks and the NSFR respectively. The Committee also maintains that Non-Basel Committee jurisdictions have also recorded substantial progress in adopting the Basel III requirements.

4. Conclusion

The Basel III is a fundamental banking reform that aims at strengthening global capital and liquidity regulations in order to promote a more resilient banking sector. This Accord was necessitated by the weakness exposed by the global financial crisis in 2007/2008. (Basel Committee on Banking Supervision, 2011; Laurens, 2012). There is no doubt that Basel III is necessary and would contribute immensely to prudent risk management and improve the soundness and stability of the international banking system. In addition to providing remedies for certain key risks such as leverage risk and liquidity risk, it enhances better asset-liability management, risk management practices and capital buffer. Basel III has better positioned the public including investors, regulations and other key stakeholders with the international

banking space to have access to banking information as a result of its improved public disclosure requirements. All these have the potential to ensure prudent risk management in the banking system. However, whether prudent risk management would be achieved with Basel III would be dependent on key factors and stakeholders. These factors regular training of supervisors, adequate logistics for effective supervision, incorporation of auditors in the implementation of the Accord, putting in place measures to compel national authorities to comply with the Accord and instituting stringent sanctions for non-compliance.

Implementation of the Basel III is said to be on track and the Basel Committee on Banking Supervision is confident the 2019 deadline would be achieved.

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